

REMARKS/ARGUMENTS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 55-86 are pending in the present application.

In the outstanding Office Action, Claims 55-86 were rejected under 35 U.S.C. §103(a) as unpatentable over Horiike (U.S. Patent No. 6,744,905) in view of Harrington (U.S. Patent No. 6,636,616).

Applicants respectfully traverse the outstanding ground of rejection because the outstanding Office Action fails to provide a *prima facie* case of obviousness by asserting prior art that, no matter how the prior art references are combined, does not teach every element of independent Claims 55, 63, 71, and 79.

To establish a *prima facie* case of obviousness, M.P.E.P. §2143 requires that three criteria must be met. First there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the references teachings. Second, there must be a reasonable expectation of success. Finally, the prior art references must teach or suggest all the claim elements.

Briefly recapitulating, Claim 55 is directed to an image processing apparatus, including: an inputting device configured to input an original image composed of a character; a background generating device configured to generate a background by using one of dither and error diffusion methods in accordance with one of a number of bits, a number of lines, and density; an embedding device configured to embed an information into the background; and a combining device configured to combine the background in which the information has been embedded with the original image. This configuration allows for information

embedding at a predetermined image quality level without deteriorating the quality of character information.¹

Claim 55 recites “a background generating device configured to generate a background by using one of dither or error diffusion methods in accordance with one of a number of bits, a number of lines, and density.” Applicants agree with the Office Action that Horiike does not teach or suggest this element of Claim 55.

The Office Action relies on Harrington to describe the above-noted element of Claim 55. Harrington describes using a modified error diffusion technique to embed a watermark into an image. As shown in Fig. 3 of Harrington, a grid pattern 12 is used for modulation of a threshold value T. The checkerboard biasing pattern makes it slightly more favorable to place dots on the black squares (-) of Fig. 3 than on the red squares (+) of Fig. 3. A digital watermark is implanted into an output copy by inverting the phase of bias. That is, as shown in Fig. 6, outside the watermark, one set of squares of the checkerboard is favored while within the watermark the other set of squares is favored.²

However, the claimed invention creates a background by “using one of dither and error diffusion methods in accordance with one of a number of bits, a number of lines, and density.” Harrington does not describe or suggest using one of a number of bits, a number of lines, and density to create the background. The error diffusion tests, at col. 5 lines 11 and 42 of Harrington, do not take into account one of a number of bits, a number of lines, and density. Rather, Harrington determines whether the intensity is greater than a threshold value to render the checkerboard biasing pattern.³ Thus, Harrington does not describe or suggest the claimed “a background generating device configured to generate a background by using

¹ Specification, page 7, lines 15-16.

² Harrington, col. 4, line 64 to col. 5, line 10.

³ Harrington, col. 5, lines 54-59.

one of dither or error diffusion methods in accordance with one of a number of bits, a number of lines, and density.”

In view of the above-noted distinctions, Applicants respectfully submit that Claims 55 (and Claims 56-62) patentably distinguish over the combination of Horiike and Harrington. In addition, Applicants respectfully submit that Claims 63-86 patentably distinguish over the combination of Horiike for at least the reasons given for Claim 55.

Consequently, in view of the above comments, it is respectfully submitted that the outstanding rejection is traversed and that the pending claims are in condition for allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Gregory J. Maier
Attorney of Record
Registration No. 25,599

Customer Number

22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 06/04)

Surinder Sachar
Registration No. 34,423